

### **REMARKS**

Claims 1-3, 5, 7-9, 11, 13, 19, and 26-27 are presently amended. Claims 4, 6, 10, 12, 16, 18, 22, 24, 25, 30, 32, 36, 38, and 39 are previously canceled without prejudice to pursuit of the same or similar claims in one or more continuation or divisional applications. Claims 1-3, 5, 7-9, 11, 13-15, 17, 19-21, 23, 26-29, 31, 33-35, 37, and 40 remain pending in this application, of which claims 1, 13, 26, 27, 33, and 40 are independent. No new matter has been added, and no new issues are raised.

#### **I. Claim Amendments**

Claims 1, 13 and 26 are amended to better point out and clarify the scope of the invention. Support for these amendments can be found in the Specification, at least on page 16, lines 7-9; page 17, line 29 to page 18, line 5; page 34, line 14-page 35, line 3.

Claims 2, 3, and 5 are amended to be consistent with the amendments to claim 1.

Claims 7 and 19 are amended to better point out and clarify the scope of the invention. Support for these amendments can be found in the Specification, at least on page 16, lines 16-20; page 18, lines 6-18; and page 26, lines 9-11.

Claims 8, 9, and 11 are amended to be consistent with the amendments to claim 7.

Claim 27 is amended to correct a typographical error.

#### **II. 35 U.S.C. § 103 Rejections**

##### **A. Rejection over See in view of Curie and Ji**

Claims 1-3, 5 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over See (US 2003/0021283) in view of Curie (US 6,871,232) and Ji (US 7,227,842) (Office Action, page 2).

Applicants respectfully submit that See, Curie and Ji, alone or in any reasonable combination, do not disclose, teach or suggest at least the following feature of claims 1 and 26: “creating one or more service abstractions, each service abstraction representing a

communications network service to be provided to users of the communications network, each service abstraction including a named set of one or more of the packet rules that, in combination, provide the represented communications network service.”

Applicants respectfully submit that See, Curie and Ji are all silent with respect to service abstractions that represent “a communications network service to be provided to users of the communications network” and include “a named set of one or more packet rules that, in combination, provide the represented communications network service.”

The Examiner equates the policy groups of See with service abstractions (Office Action, page 2). Applicants respectfully disagree. See’s policy groups are based on a rule type, and a rule type organizes policies for managing network traffic of the network (See, ¶ [0035]). In contrast, Applicants’ service abstraction includes “a named set of packet rules that, in combination, provide the represented communications network service.” See does not disclose or suggest that the rules of a policy group “in combination, provide the represented communications network service.” Thus, See does not disclose or suggest a “service abstraction including a named set of one or more of the packet rules that, in combination, provide the represented communications network service.”

Moreover, the Examiner acknowledges that See fails to describe “associating the one or more service abstractions with the identity of the authenticated user of the communications network” and controlling usage based on the identity of an authenticated user. However, the Examiner alleges that Curie’s “associating/grouping common policy (abstraction) with the user so that the user can use the network resources” is equivalent to “associating the one or more service abstractions with the identity of the authenticated user” (Office Action, page 3). Applicants respectfully disagree.

Applicants respectfully submit that Curie does not disclose, teach or suggest *service abstractions*. Curie’s policies are not equivalent to service abstractions because they do not include “a named set of one or more of the packet rules that, in combination, provide the represented communications network service.” In fact, Curie is silent with respect to the use of packet rules. Thus, Curie does not disclose, teach or suggest “associating the one or more service abstractions with the identity of the authenticated user of the communications network.”

In addition, claim 1 recites that service abstractions are used “in response to receipt of a packet at any of the network devices from the authenticated user ... to control usage of network resources on the communications network, the using including applying the packet rules in the one or more service abstractions to the packet.” Curie’s policies, on the other hand, are used when “a provisioning user interface (screen) on a Web browser [is] connected to an organizational network. This screen would enable human resources personnel to input known ... attributes. The RPM system would then search its stored policies and, based on the ... attributes, determine a set of resources to be provisioned.” (Curie, col. 22, lines 35-40). Thus, Curie’s policies are used to “determine a set of resources to be provisioned.” Applicants respectfully submit that Curie’s teaching that policies are used to determine which resources should be provisioned is not equivalent to Applicants’ service abstractions, which are used to “control usage of network resources on the communications network” by “applying the packet rules in the one or more service abstractions to the packet,” because Applicants’ claim 1 applies the packet rules when a packet is received at a network device, whereas Curie applies its policies whenever a human resources personnel queries the policy database through a user interface.

Ji is directed to a data structure that enables fast packet classification (Ji, col. 4, lines 26-28). Ji does not disclose, teach or suggest service abstractions.

For at least the reasons set forth above, Applicants respectfully submit that the combination of See, Curie, and Ji, alone or in any reasonable combination, do not disclose, teach or suggest each and every feature of claims 1 and 26.

Claims 2-3 and 5 depend directly or indirectly from independent claim 1. Therefore, claims 2-3 and 5 incorporate the patentable elements of claim 1.

In light of the foregoing arguments, Applicants respectfully request the Examiner to reconsider and withdraw the rejections of claims 1-3, 5 and 26.

**B. Rejection over See in view of Curie and Ji, and further in view of Azarmi**

Claims 7-9, 11, 27-29 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over See in view of Curie and Ji, and further in view of Azarmi (US 5,905,715) (Office Action, page 8).

**i. Claims 7-9 and 11**

Claims 7-9 and 11 depend directly or indirectly from independent claim 1. Therefore, claims 7-9 and 11 incorporate each and every feature of claim 1. As discussed above, See, Curie and Ji do not disclose, teach or suggest service abstractions. The Examiner alleges that Azarmi's "management rule profiles" may be equated to service abstractions (Office Action, page 8). Applicants respectfully disagree.

Azarmi's states that a *profile* "describes how a feature is supported in terms of management, such as maintenance, provision or billing, and performance/quality of service requirements" (Azarmi, col. 10, lines 5-10) (emphasis added). For example, the *bandwidthProfile* "describes the bandwidth characteristics of the data being supplied by the service and the management actions to be taken if these requirements are not met" (Azarmi, col. 18, lines 61-65). Thus, Azarmi's profiles merely describes desired features, and do not implement the features. In contrast, Applicants' service abstractions include "a named set of one or more packet rules that, in combination, provide the represented communications network service." Azarmi does not disclose or suggest that a management rule profile includes a set of packet rules, or that the rules in the profile "in combination, provide the represented communications network service." Accordingly, Azarmi does not disclose, teach or suggest service abstractions.

Therefore, Curie, See, Ji and Azarmi, alone or in any reasonable combination, do not disclose, teach or suggest each and every feature of claims 7-9 and 11.

**ii. Claims 27-29 and 31**

Applicants respectfully submit that See, Curie, Ji and Azarmi, alone or in any reasonable combination, do not disclose, teach or suggest at least the following feature of claim 27:

“defining one or more role abstractions associated with an authenticated user, each role abstraction representing a role of an authenticated user with respect to the communications network for controlling usage of network resources on the communications network by the authenticated user, and each role abstraction including a set of one or more packet rules.”

The Examiner acknowledges that See does not define role abstractions, but alleges that Azarmi does (Office Action, page 10). In particular, the Examiner alleges that Azarmi describes role abstractions that include “a set of one or more packet rules” because Azarmi describes “management rule profiles containing management rules” (Office Action, pages 10-11). Applicants respectfully disagree.

As discussed above, with respect to claim 7, Azarmi’s *profiles* merely describe desired features. Thus, Azarmi’s *management rules* would not contain or be equivalent to *packet rules*, which are rules that “include[e] a condition and action to be taken if a packet received at a device satisfies the condition.” In fact, Applicants respectfully submit that Azarmi is silent with respect to the use of packet rules. Accordingly, Azarmi does not describe or suggest Applicants’ role abstraction.

Curie and Ji also do not describe or suggest a “role abstraction including a set of one or more packet rules.” Therefore, See, Curie, Ji and Azarmi, alone or in any reasonable combination, do not disclose, teach or suggest each and every feature of claim 27.

Claims 28-29 and 31 depend directly or indirectly from independent claim 27. Therefore, claims 28-29 and 31 incorporate the patentable elements of claim 27.

In light of the foregoing arguments, Applicants respectfully request the Examiner to reconsider and withdraw the rejections of claims 7-9, 11, 27-29 and 31.

### **C. Rejection over See in view of Nessel, Curie and Ji**

Claims 13-15 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over See in view of Nessel (no citation provided for Nessel), Curie and Ji (Office Action, page 14).

As stated in Applicants' February 25, 2008 and March 25, 2008 responses, the Examiner has not provided a citation for Nessett. Applicants request that the Examiner provide a citation for the Nessett reference.

Regardless, as discussed above, See, Curie and Ji do not disclose, teach or suggest Applicants service abstraction. The Examiner does not allege that Nessett discloses a service abstraction that "representing a communications network service to be provided to users of the communications network, each service abstraction including a named set of one or more of the packet rules that, in combination, provide the represented communications network service." Accordingly, Applicants respectfully submit that See, Nessett, Curie and Ji do not disclose, teach or suggest each and every feature of claim 13.

Claims 14-15 and 17 depend directly or indirectly from independent claim 13. Therefore, claims 14-15 and 17 incorporate the patentable elements of claim 13.

In light of the foregoing arguments, Applicants respectfully request the Examiner to reconsider and withdraw the rejections of claims 13-15 and 17.

**D. Rejection over See in view of Nessett, Curie and Ji, and further in view of Azarmi**

Claims 19-21 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over See in view of Nessett, Curie and Ji, and further in view of Azarmi (Office Action, page 18).

Claims 19-21 and 23 depend directly or indirectly from independent claim 13. Therefore, claims 19-21 and 23 incorporate each and every feature of claim 13.

As discussed above with respect to claim 13, See, Nessett, Curie and Ji, alone or in any reasonable combination, do not disclose, teach or suggest Applicants' service abstractions. As discussed above with respect to claim 7, Azarmi also does not disclose, teach or suggest Applicants' service abstractions. Accordingly, See, Nessett, Curie, Ji, and Azarmi, alone or in any reasonable combination, do not disclose, teach or suggest Applicants' service abstractions.

In light of the foregoing arguments, Applicants respectfully request the Examiner to reconsider and withdraw the rejections of claims 19-21 and 23.

**E. Rejection over See in view of Azarmi, Nessett and Curie and Ji**

Claims 33-35, 37 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over See in view of Azarmi, Nessett and Curie and Ji (Office Action, page 19).

**i. Claims 33-35, 37 and 40**

Applicants respectfully submit that See, Azarmi, Nessett, Curie and Ji, alone or in any reasonable combination, do not disclose, teach or suggest at least the following feature of claim 33: “a role editing module to create, in response to a user, one or more role abstractions associated with an authenticated user, each role abstraction representing a role of an authenticated user with respect to the communications network for controlling usage of network resources on the communications network by the authenticated user, and each role abstraction including a set of one or more packet rules.”

The Examiner again relies on Azarmi for support for “each role abstraction including a set of one or more packet rules”. However, as discussed above with respect to claim 27, Azarmi does not disclose role abstraction that include “a set of one or more packet rules” because Azarmi’s management rule profiles merely describe desired management features and Azarmi is notably silent with respect to the use of packet rules. Accordingly, See, Azarmi, Nessett, Curie and Ji, alone or in any reasonable combination, do not disclose, teach or suggest each and every feature of claim 33.

Claims 34-35 and 37 depend directly or indirectly from independent claim 33. Therefore, claims 34-35 and 37 incorporate the patentable features of claim 33.

**ii. Claim 40**

Applicants respectfully submit that See, Azarmi, Nessett, Curie and Ji, alone or in any reasonable combination, do not disclose, teach or suggest at least the following feature of claim 40: “creating one or more role abstractions associated with an authenticated user, each role abstraction representing a role of an authenticated user with respect to the communications network for controlling usage of network resources on the communications network by the authenticated user, and each role abstraction including a set of one or more packet rules.”

The reasons stated above for why See, Azarmi, Nessett, Curie and Ji, alone or in any reasonable combination, do not disclose, teach or suggest this feature in claim 33 apply to claim 40 as well.

In light of the foregoing arguments, Applicants respectfully request the Examiner to reconsider and withdraw the rejections of claims 33-35, 37 and 40.

### **III. Conclusion**

In view of the above amendment and remarks, Applicants believe the pending application is in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If, however, the Examiner considers that obstacles to allowance of these claims persist, we invite a telephone call to Applicants' representative.

Applicants believe no fee is due with this Amendment. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. ENB-012RCE2 from which the undersigned is authorized to draw.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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